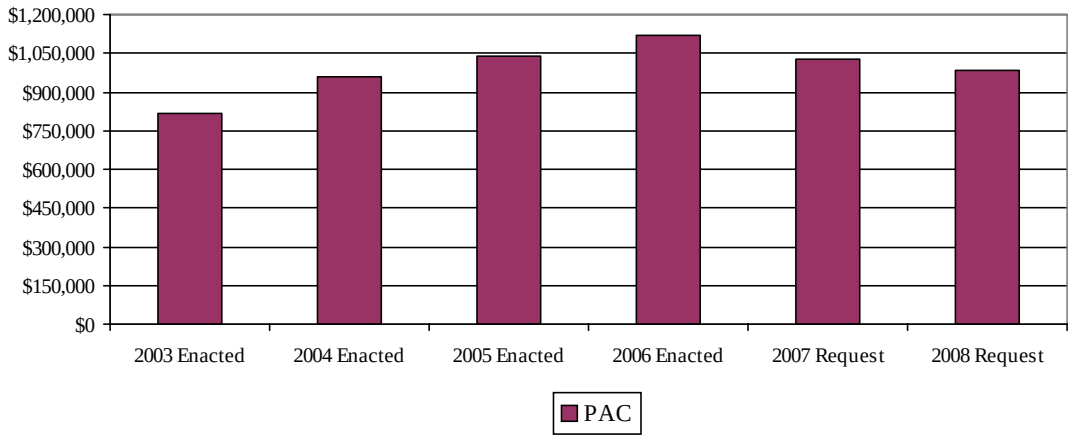
Chapter 4

Procurement, Acquisition and Construction

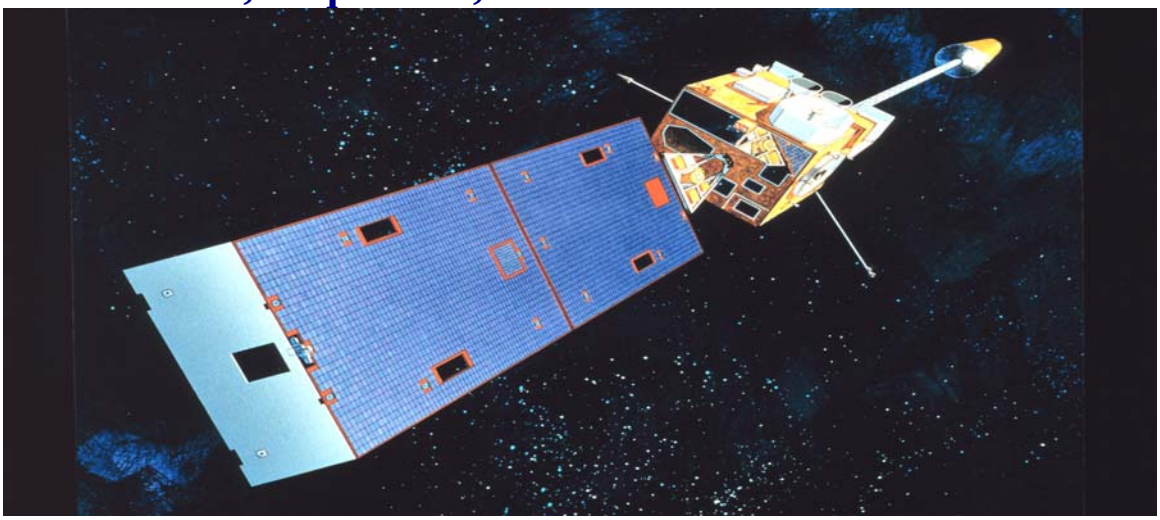
Procurement, Acquisition and Construction

(Dollars in Thousands)	FY 2006 Enacted	FY 2007 Request	Program Changes	Total Request
Procurement, Acquisition and Construction (PAC)				
Systems Acquisition				
Ocean and Atmospheric Research	$9,369	$10,379	$0	$10,379
National Weather Service	79,575	66,611	(800)	69,081
National Environmental Satellite, Data and Information Service	772,234	882,076	(63,798)	818,278
Program Support	17,730	0	0	0
Total Systems Acquisition	878,908	959,066	(64,598)	897,738
Construction				
National Ocean Service	91,311	12,673	15,000	27,673
National Marine Fisheries Service	30,444	0	0	0
National Weather Service	21,825	31,809	(5,205)	26,604
National Environmental Satellite, Data and Information Service	2,249	2,228	0	2,228
Program Support	19,725	0	23,250	23,250
Total Construction	165,554	46,710	33,045	79,755
Fleet - OMAO	61,596	20,691	(16,291)	4,400
Aircraft - OMAO	13,486	0	0	0
GRAND TOTAL PAC	$1,119,544	$1,026,467	(47,844)	$981,893
Total FTE	174	181	(4)	190

Budget Trends, FY 2003 - 2008 (dollars in thousands)



Procurement, Acquisition, and Construction



NOAA's Procurement, Acquisition, and Construction (PAC) account captures the cost of acquiring and improving capital assets, which are mission-critical to all agency programs and contribute significantly to achieving each of NOAA's Strategic Goals. This account is grouped by line office into three common activities: "Systems Acquisition," which includes projects that will have a major impact on NOAA's ability to monitor and to forecast weather and climate change on a global basis; "Construction," which includes projects involving new construction, or major modification of existing facilities; and "Fleet and Aircraft Replacement," which includes funding to support modernization of NOAA's fleet of ships and aircraft either through new construction, major modification to existing assets, or long-term acquisition of capacity from third parties.

ADJUSTMENTS TO BASE:

The NOAA Procurement, Acquisition, and Construction (PAC) requests adjustments to FY 2008 Base of $31,034,000.

PAC PROGRAM CHANGE HIGHLIGHTS FOR FY 2008:

For FY 2008, NOAA requests a net decrease of $47,844,000 for a total of $981,893,000 for procurement, acquisition, and construction programs. These changes include 21 major system programs, seven construction projects and three fleet projects, and withdrawal of funding for three vessel projects. Detailed numeric breakouts are located in Chapter 6, *Special Exhibits*. Descriptions of each request by line item are located in the NOAA FY 2008 Technical Budget. Note that outyear figures are estimates, and future requests will be determined through the annual budget process.

SYSTEMS ACQUISITION **$897,738,000**

National Weather Service **$69,081,000**

Automated Surface Observing System

Annual Funding Requirements
(BA in Thousands)

	FY2008	FY 2009 Estimate	FY2010 Estimate	FY20011 Estimate	FY2012 Estimate
ASOS	1,635	1,635	1,635	1,635	1,635

NOAA requests a decrease of $2,300,000 and 0 FTEs in ASOS Product Improvement (PI) funding to fund higher priority NWS requirements. This reduction eliminates NWS development and deployment of the ASOS Enhanced Precipitation Identifier (EPI) sensors. This reduction will also defer completion of scheduled ASOS ceilometer deployment from FY 2009 to FY 2013.

NWS Telecommunication Gateway Legacy Systems Replacement

Annual Funding Requirements
(BA in Thousands)

	FY2008	FY 2009 Estimate	FY2010 Estimate	FY2011 Estimate	FY2012 Estimate
NWSTG	1,195	1,195	1,195	1,195	1,195

NOAA requests an increase of $700,000 and 0 FTEs for the ongoing technology refresh of the NWSTG primary system and its mirrored Critical Infrastructure Protection Backup System in Berryville, VA. The NWSTG is the NWS communications hub for collecting and distributing weather information to its field units and external users. Replacing the NWSTG system with up-to-date technology will reduce the current delays in collecting and disseminating data by reducing transit time through the NWSTG. Funds are for the acquisition of mission-critical servers, network hardware, and facility upgrades to meet a nearly 200 percent increase in throughput in FY 2008 and to continue to meet federal critical IT system certification.

Strengthen U.S. Tsunami Warning Network

Annual Funding Requirements
(BA in Thousands)

	FY2008	FY 2009 Estimate	FY2010 Estimate	FY20011 Estimate	FY2012 Estimate
Strengthen Tsunami	0	0	0	0	0

NOAA requests a planned decrease of $1,030,000 and 0 FTE for a total of $0 in FY 2008 to reflect the completion of the production of the Deep-ocean Assessment and Reporting of Tsunamis (DART) buoys.

NOAA Profiler Conversion

Annual Funding Requirements
(BA in Thousands)

	FY2008	FY 2009 Estimate	FY2010 Estimate	FY2011 Estimate	FY2012 Estimate
NOAA Profiler Conversion	5,100	9,730	4,870	4,870	0

NOAA requests an increase of $1,830,000 and 0 FTEs to replace NOAA Profiler transmitters that interfere with Search and Rescue Satellites and to conduct tech refresh of the 20-year-old network. Specifically in FY 2008, NWS will upgrade/convert three of the profilers. The Wind Profilers, vertical looking radars installed in 1988, are used as input for numerical (computer) weather models that predict clouds, precipitation, and temperature. The data also provide important indicators of where severe weather such as tornadoes and winter storms may form and is used for issuing aviation advisories and wildfire predictions at local Weather Forecast Offices (WFOs). Research has shown that Wind Profiler data improves accuracy and lead times for tornado, severe thunderstorm, flash flood, and winter storm warnings.

Thirty-two of the 37 wind profiles are using an experimental transmitter frequency of 404 megahertz (MHz) issued by the National Telecommunications and Information Administration (NTIA). NTIA has given the 404 MHz frequency to search and rescue satellites (SARSAT) and granted the NPN permanent use of 449 MHz. Thirty operational 404 MHz wind profilers require their transmitters to be converted from 404 to 449 MHz by the end of the FY 2008 when the new SARSATS are launched.

In addition to the 30 operational sites using 404MHz, there are two additional 404 MHz wind profilers at the National Reconditioning Center and the National Weather Service Training Center (used for testing and training). There are also five wind profilers in the NPN that operate at the non-interfering 449 MHz frequency: three in Alaska, one in Syracuse, NY, and one in Platteville, CO.

National Environmental Satellite, Data, and Information Service **$818,278,000**

Geostationary Operational Environmental Satellites

Annual Funding Requirements
(BA in Thousands)

	FY2008	FY 2009 Estimate	FY2010 Estimate	FY2011 Estimate	FY2012 Estimate
GOES N	80,379	73,263	57,601	49,500	45,894
GOES R	279,000	477,000	615,000	589,000	452,000
GOES Total	359,379	550,263	672,601	638,500	497,894

Geostationary Operational Environmental Satellite (GOES):

- **NOAA is requesting a decrease of $80,228,000 and 0 FTE for the Geostationary Operational Environmental Satellites** (GOES) to fund GOES-N and GOES-R series satellites which serve as the Nation's continuous severe weather sentinels in space.

  - **NOAA is requesting a decrease of $26,780,000 and 0 FTE for the GOES-N Series.** This decrease is part of the previously planned budget profile based on the stage of the GOES-N acquisition program and allows the NOAA GOES program to continue development, procurement, and launch of the next series of three GOES satellites in the GOES-N series. The spacecraft contract for the GOES-N series is a firm, fixed-price contract, with separate contracts for the instruments: one for the imager and sounder, and one for the Solar X-ray Imager. The instrument contractors have completed delivery of all flight model instruments.

    FY 2008 GOES-N funding will be used for spacecraft and launching preparations for GOES-O, continued work on GOES-P, NASA technical management, the Government Program Office, product development, and ground systems and backup.

  - **NOAA is requesting a decrease of $53,448,000 and 0 FTE for the GOES-R Series** to provide continuity of satellite development and ensure uninterrupted coverage with advanced capabilities for NOAA's geostationary satellite constellation. The FY 2008 request is below previously requested amounts due to

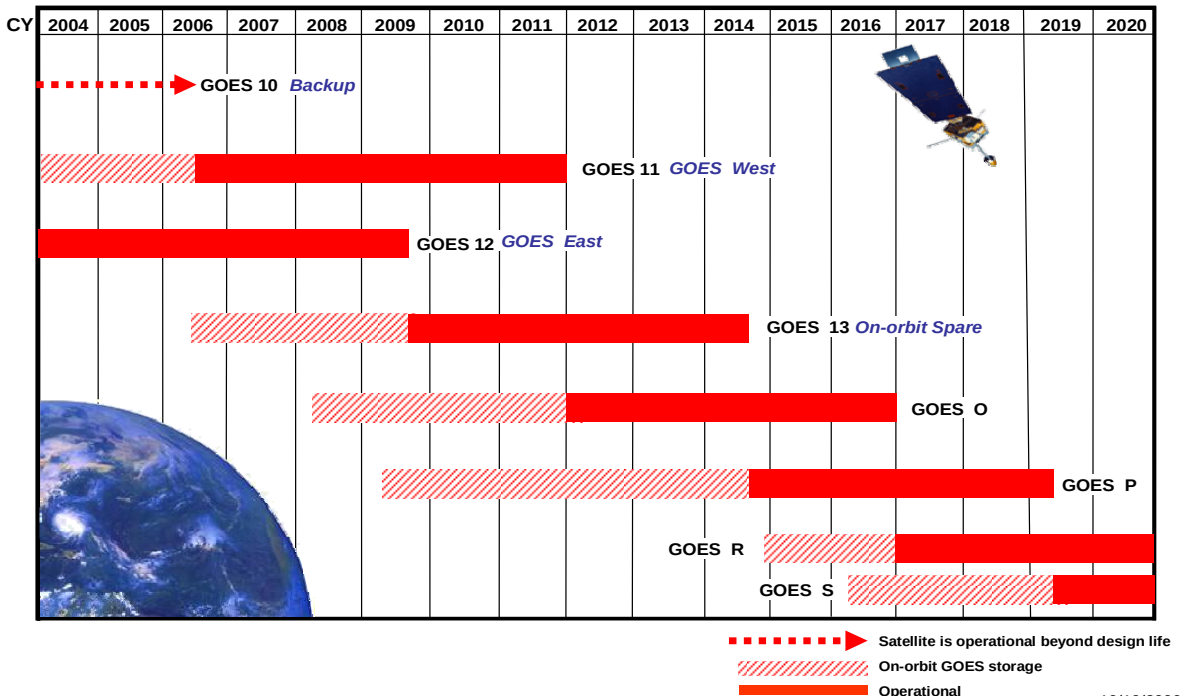
changes in the program content and timing of the first satellite launch of the series. These revised funding amounts are based on a restructured GOES-R program and the success of the on-orbit GOES I-M series satellites. As such, the projected launch date for GOES-R is now no earlier than 2014. This later date provides additional opportunities to mitigate identified risks in GOES-R development, such as the Hyperspectral Environmental Suite (HES) instrument, which was deleted from the program due to concerns about technologial risk and affordability.

- The GOES-R series satellites will not only provide critical weather observations for severe weather events such as hurricanes, but will also provide key enhancements in observational capabilities for climate, oceans and coasts, and the space environment. Specific improvements include:

  - Spatial resolution will improve from 1 km to 0.5 km and provides the ability to issue severe storm warnings and protect life and property at neighborhood vs. regional levels.
  - Infrared imagery will improve from 4 km to 2 km, enhancing NOAA's ability to monitor and track snowfall and ice storms and issue winter storm warnings and spring snow melt advisories.
  - Full disk image availability will improve from every 30 minutes to every five minutes, an improvement that is critical to monitoring severe storm activity and will result in earlier warnings to populations at risk.
  - Lightning mapper will provide improved warnings of severe thunderstorms, tornados, and potential lightning strikes, resulting in safer and more efficient flight route planning over water and land.

  - FY 2008 GOES-R funding will be used for systems engineering, continued development of satellite instruments, risk reduction activities, transition to the system-level acquisition and operations (A&O) phase of the program, and the NOAA-NASA government program office in support of an initial GOES-R launch date in 2014. The Acquisition and Operations (A&O) phase includes end-to-end system development and integration, instrument development and production, and the development and production of the spacecraft and ground system.

Continuity of GOES Operational Satellite Program



Polar-Operational Environmental Satellite Systems

Annual Funding Requirements
(BA in Thousands)

	FY2008	FY 2009 Estimate	FY2010 Estimate	FY2011 Estimate	FY2012 Estimate
POES	114,906	61,919	43,635	41,374	41,374

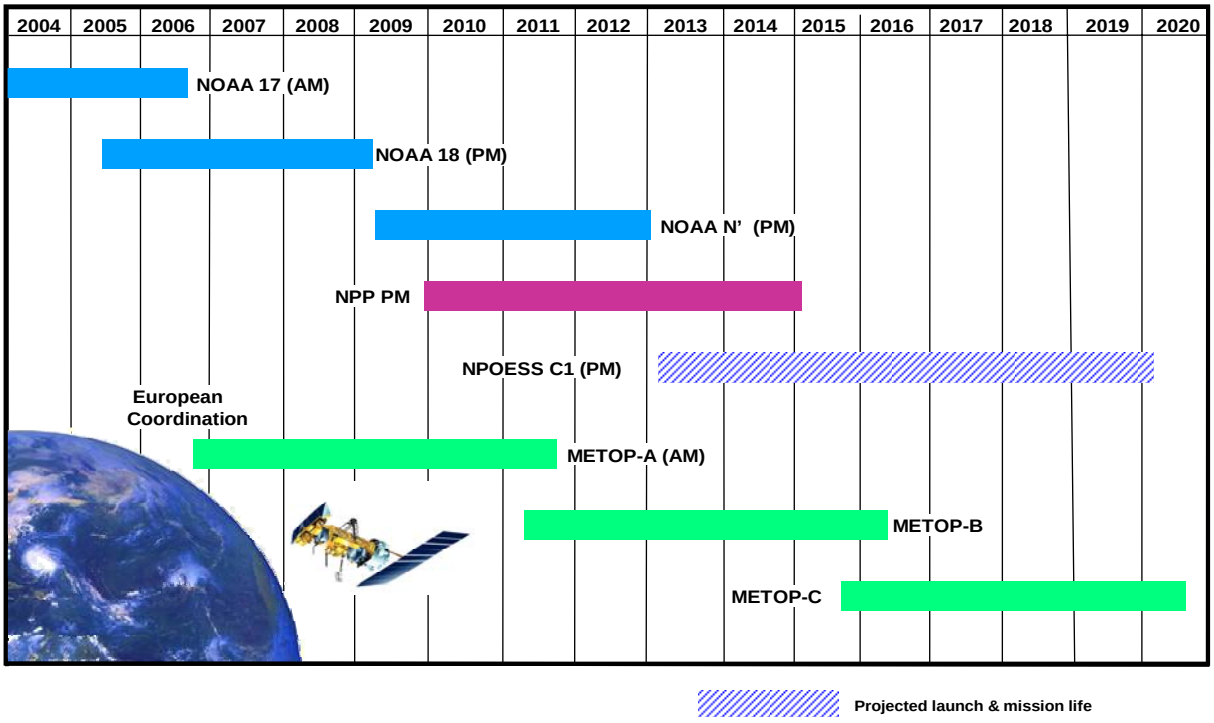
NOAA requests an increase of $25,000,000 and 0 FTE for the continuation of the Polar-Operational Environmental Satellite Systems (POES) program. POES is nearing the end of its production cycle, with one remaining satellite to be launched, NOAA-N Prime. The POES program also supports NOAA's contribution to the European MetOp polar satellite program under the Initial Joint Polar-Orbiting Operational Satellite System (IJPS) agreement.

Several factors drive the FY 2008 POES budget request. In 2003, NOAA-N Prime was involved in a serious accident at the contractor's facility. The damage to NOAA-N Prime spacecraft was assessed, estimated rebuild costs were developed, and agreements negotiated. With NOAA's approval, a contract modification between NASA and Lockheed Martin to rebuild NOAA-N Prime was signed in 2004. On a separate track, in June 2006, DoD, DOC, and NASA certified a restructured NPOESS program under the Nunn-McCurdy process. As part of that process, NOAA agreed to delay the launch of NOAA-N Prime from December 2007 until February 2009 to minimize the potential gap in polar-orbiting data and services until the first NPOESS satellite is fully operational in 2014.

The funding profile in the FY 2007 President's Budget assumed a decrease in the POES funding for FY 2008. This planned decrease combines with requested increases for a net increase of $25,000. Requested increases will be used for:

- $36,000,000 to implement a cost-efficient NOAA-N Prime rebuilding and storage plan to support a February 2009 launch.
- $9,300,000 to restore NOAA-N Prime funding, which was redirected to NOAA-N in 2005 to cover the cost of an unplanned delay in the NOAA-N launch from February 2005 to May 2005.
- $7,298,000 to provide support to the annual testing of the European Metop-B satellite and to the installation and maintenance of NOAA instruments on the Metop-C satellite.

Continuity of Polar Operational Satellite Programs



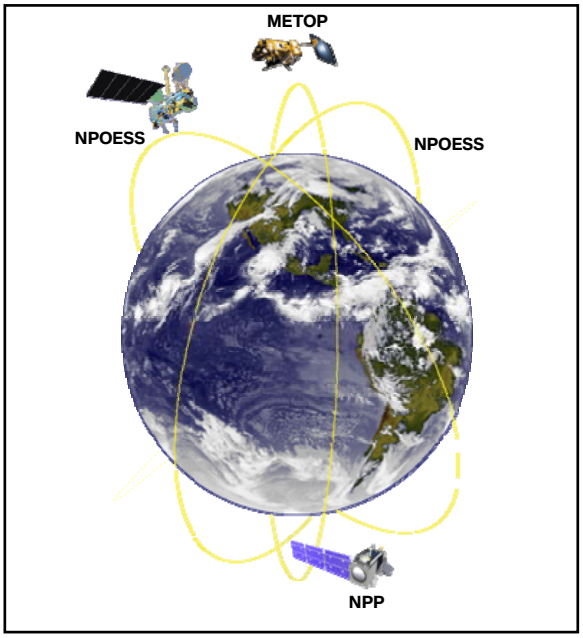
National Polar-orbiting Operational Environmental Satellite Systems

Annual Funding Requirements
(BA in Thousands)

	FY2008	FY 2009 Estimate	FY2010 Estimate	FY2011 Estimate	FY2012 Estimate
NPOESS	331,300	287,985	381,794	420,332	415,819

NOAA is requesting a decrease of $6,570,000 and 0 FTE for NOAA's contribution to the continued development of the tri-agency National Polar-orbiting Operational Environmental Satellite System (NPOESS) program that will replace the NOAA POES program after completion of the current NOAA K-N Prime series of satellites. This request represents NOAA's 50 percent share of the Tri-agency partnership. In FY 2008, funds are required to continue the development, production, and risk reduction activities for the certified NPOESS spacecraft and instruments, including the Visible Infrared Image Radiometer (VIIRS), the new Microwave Imager Sounder (MIS), the Cross-track Infrared Sounder (CrIS), and the Ozone Mapping and Profiler Suite (OMPS). Continued development of these instruments is critical for their timely and cost effective delivery to support the NPOESS Preparatory Project (NPP) scheduled for launch in calendar year 2010 and the first NPOESS satellite in calendar year 2013.

The funding profile is based on the Nunn-McCurdy Certification presented to Congress in June 2006.



CONSTRUCTION **$79,755,000**

National Ocean Service **$27,673,000**

Coastal and Estuarine Land Conservation Program

Annual Funding Requirements

(BA in Thousands)

	FY2008	FY 2009 Estimate	FY2010 Estimate	FY2011 Estimate	FY2012 Estimate
CELCP	15,000	15,000	15,000	15,000	15,000

NOAA requests an increase of $15,000,000 and 1 FTE to conserve high priority coastal and estuarine lands that have significant value and support NOAA's stewardship requirements through the Coastal and Estuarine Land Conservation Program (CELCP). With this increase, NOAA will provide funding for land conservation projects identified through a competitive selection process, based on habitat types or geographic areas identified by coastal states as having high ecological, conservation, recreational, historic, or aesthetic value that are threatened by development, such as tidal or freshwater wetlands, stream buffers, or floodplains. Federal funding requires matching funds, which leverage additional state, local, or private contributions.

As part of this voluntary program, coastal states assess their priority needs for land conservation and provide a clear process for identifying and nominating projects to a national selection process. The program's focus on "project areas" encourages public/private partnerships to protect priority areas. State or local governments own the land or interests in land, which may be acquired from willing sellers only, and ensure long-term protection and provide public access for passive recreational opportunities or other public benefit.

NOAA has developed and issued guidelines delineating criteria for grant awards and a process for conducting a national competitive grants program under the CELCP. The program gives priority to lands that can be effectively managed and protected and that have significant ecological value. This request supports efforts to protect important stream corridors and habitats important to anadromous fish, reduce the flow of polluted runoff into coastal waters, lessen the impacts of coastal flooding from severe storm events, and provide opportunities for coastal recreation and nature-based tourism. This request would also enable NOAA to support strategic program planning and management of the CELCP as a competitive program.

National Weather Service **$26,604,000**

Annual Funding Requirements

(BA in Thousands)

	FY2008	FY 2009 Estimate	FY2010 Estimate	FY2011 Estimate	FY2012 Estimate
NCWCP	14,100	6,700	6,700	6,700	6,700

NOAA requests a planned decrease of $5,205,000 for a total funding request of $14,100,000 and 0 FTE to complete the NOAA Center for Weather and Climate Prediction (NCWCP) for FY 2008 occupancy and operations. This FY 2008 decrease is consistent with the planned NCWCP investment profile to implement mission-critical systems overlap during the transition/move from the current World Weather Building (WWB) to the NCWCP.

This project is a key component of the NWS' effort to improve its weather and climate modeling performance, to accelerate the transfer of newly developed scientific information into operations, and to improve the use of global environmental satellite data. NWS has demonstrated a direct linkage between establishing new facilities in the proximity of research organizations, and improved program performance. The expiration of the WWB lease dictates the timing of the NCWCP project and affords an outstanding opportunity to enhance the NWS efforts to protect the continuity and flow of critical weather warning, forecasts, and data products to the Public.

The award of the lease by GSA in September 2005 ensures occupancy of the new facility in July 2008. The FY 2005 funding provided project management for NOAA and allowed NOAA to initiate the planning and engineering required to support the mission systems relocation. In FY 2007 NOAA will install telecommunications cabling to

complete the interior design, acquire and install system furniture, and begin relocation. In FY 2008, construction of the NCWCP will be completed, including all tenant improvements and outfitting, and NOAA staff will take occupancy. Scheduled activities include completions of additional critical IT system infrastructure, needed to complete the 24x7 transition; installation of additional systems furniture and other outfitting; payment of additional rent, utility, security, and operations and maintenance required for the new facility; and completion of remaining project management.

Program Support Construction **$23,250,000**

Pacific Region Center

Annual Funding Requirements

(BA in Thousands)

	FY2008	FY 2009 Estimate	FY2010 Estimate	FY2011 Estimate	FY2012 Estimate
PRC	20,250	75,721	0	0	0

NOAA requests an increase of $20,250,000 and 0 FTE for continuation of construction of the new Pacific Regional Center (PRC) on Ford Island in Honolulu, HI. This requested increase will enable NOAA to meet the most pressing facilities needs for NOAA programs in Hawai'i.

Funding at the requested level in FY 2008 will allow NOAA to complete the exterior "shell" renovation of building 176 on the PRC site at Ford Island. Full renovation of Building 176 (including interior build-out and renovation) will enable NOAA to relocate operations from the current Kewalo Basin and Dole Street facilities.

Completion of this renovation will allow NOAA to consolidate fisheries research, and management programs, which will also be co-located with docking space for the three

NOAA ships currently based in Hawai'i. NOAA has identified options for further construction on the Ford Island site that would allow for additional consolidation of NOAA's current locations on the island of O'ahu (with the exception of the Weather Forecast Office). NOAA will continue to consider the potential programmatic benefits of co-location as well as the cost-effectiveness of proceeding with construction options of broader scope. The benefits and cost effectiveness of these additional options will be evaluated and prioritized through the annual budget process.

La Jolla Southwest Fisheries Science Center

Annual Funding Requirements

(BA in Thousands)

	FY2008	FY 2009 Estimate	FY2010 Estimate	FY2011 Estimate	FY2012 Estimate
La Jolla	3,000	2,081	0	0	0

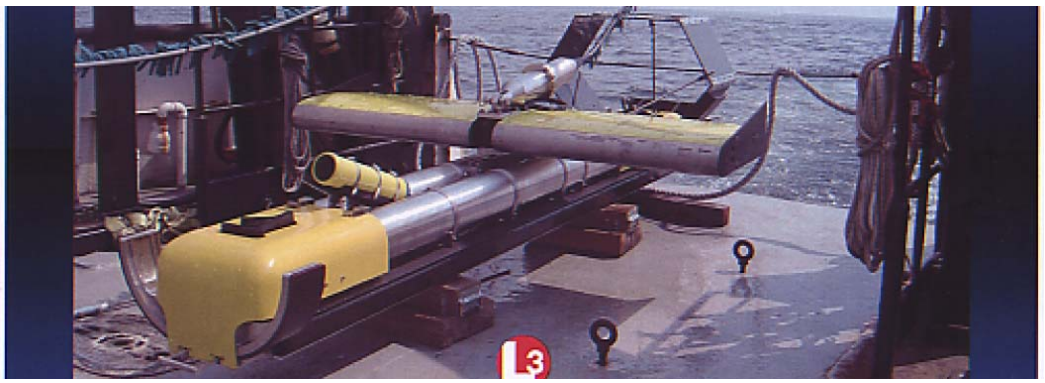
NOAA requests an increase of $3,000,000 and 0 FTE to begin the design phase for the construction of the replacement laboratory facility for the La Jolla Southwest Fisheries Science Center in La Jolla, California.

NOAA's National Marine Fisheries Service (NMFS) Southwest Fisheries Science Center (SWFSC) headquarters in La Jolla, California, is at risk due to continuing cliff erosion. Numerous geotechnical studies of the current site have identified natural cliff erosion as inevitable and have stated that failure of the cliff (and facilities located on the cliff) is inescapable. The cliff erosion has forced NOAA to develop plans to abandon two of the four buildings at this facility and move staff to temporary leased space. This temporary housing arrangement adversely affects ongoing operations and science at the facility and is not a long-term solution. NOAA is examining site alternatives to the current situation, including dispersing operations to other NOAA locations (none of which are in the La Jolla area), and reported these alternatives as part of a 2004 report to Congress on site alternatives. The funding requested will support the design of a potential replacement.

This initiative will enable NOAA to address the ongoing natural bluff erosion threatening the current site, and the NOAA programs supported at this site. NOAA conducts scientific research on critical fisheries management issues at the SWFSC. These scientific research and fisheries management programs have extended social and economic impacts in the Pacific. This project will enable NOAA to continue to conduct these important programs in a safe environment.

FLEET REPLACEMENT **$4,400,000**

Office of Marine and Aviation Operation **$4,400,000**



Vessel Equipment and Technology Refreshment

(BA in Thousands)

	FY2008	FY 2009 Estimate	FY2010 Estimate	FY2011 Estimate	FY2012 Estimate
Vessel Equip. & Tech. Refresh.	1,000	3,000	3,000	3,000	3,000

NOAA requests $1,000,000 and 0 FTE for Vessel Equipment and Technology Refreshment. This request will fund the replacement of obsolete mission equipment on several NOAA vessels, based on a rolling replacement schedule. Data acquisition and processing systems will be installed on the RONALD H. BROWN, and the NANCY FOSTER, side-scan sonars on the THOMAS JEFFERSON, and moving vessel profilers on the RAINIER and the NANCY FOSTER.

Fisheries Survey Vessels

(BA in Thousands)

	FY2008	FY 2009 Estimate	FY2010 Estimate	FY2011 Estimate	FY2012 Estimate
Fisheries Survey Vessels	0	0	0	0	0

NOAA requests a decrease of $13,791,000 and 0 FTE for Fisheries Survey Vessels. Of this termination, $1,000,000 represents the closeout of the FSV 3 project, and $12,791,000 represents the completion of the construction of FSV 4. Operational and maintenance funding has been requested in the ORF section to allow NOAA to begin utilizing the platforms to collect fish-stock data as well as data necessary to protect marine mammals. FSV 3 and 4 will deploy state-of-the-art acoustic technologies, combined with a very quiet radiated-noise signature, to enhance the effectiveness and efficiency of at-sea resource surveys. There are no charter vessels that can provide this acoustically quiet capability. These capabilities will enable NOAA to monitor up to nine times more volume of water for the same time and distance traveled by NOAA's current ships. These vessels will be able to fully utilize Autonomous Underwater Vehicles to

extend survey sampling beyond the trackline of the ship. The ships will support NOAA's Ecosystem Mission Goal.

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